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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/461,663	12/14/99	BARCLAY	W 2997-1-3-1-4

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HM12/0508

EXAMINER

WARE, D

ART UNIT

PAPER NUMBER

1651

DATE MAILED: 05/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.	09/461,663	Applicant(s)	Barclay
Examiner	Ware	Group Art Unit	1651

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

Responsive to communication(s) filed on 2-16-01

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

### Disposition of Claims

Claim(s) 38-74 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) 68-71 is/are allowed.

Claim(s) 38-50, 83-60 and 63-65 is/are rejected.

Claim(s) 51-52, 61-62, 66-67 and 72-74 is/are objected to.

Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

### Application Papers

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - All  Some\*  None of the CERTIFIED copies of the priority documents have been received.
  - received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

### Attachment(s)

- Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- Interview Summary, PTO-413
- Notice of Reference(s) Cited, PTO-892
- Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Other \_\_\_\_\_

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Claims 38-74 are presented for reconsideration on the merits.

The amendment and terminal disclaimer filed February 16, 2001, have been received and entered.

Based upon a new reading of the claimed subject matter new art was found to read on the claims as follows:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 38-50, 53-60 and 63-65 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **newly cited** Cassidy et al. (A).

4. Claims are drawn to a fermentor comprising a culture medium in which one of the inorganic ions is sodium which is provided in the form of non-chloride sodium salt and further the culture medium contains a chloride concentration of less than about 3 grams chloride per liter

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of culture medium, further resulting in reduced fermentor corrosion compared to culture medium containing sodium chloride salt as the primary source of sodium.

Cassidy et al. (Cassidy) teach culture medium containing Davis Salts, which is a group of salts that includes non-chloride sodium salt and further contains salts having a sulfate ion group, note column 20, lines 20-30. Further, a culture medium B is disclosed by Cassidy which contains non-chloride salts such as sodium phosphate buffer solution and magnesium sulfate, note column 20, lines 60-65. The disclosure directs one of skill to the selection of nutrient media containing sources of carbon, nitrogen and inorganic salts assimilable by microorganisms, note column 6, lines 24-27 and lines 50-55, which include a laundry lists of sodium, sulfate and chloride ions (i.e. salts) which may be included in the culture medium for fermentation.

The claims appear to be identical to the disclosure of Cassidy and are, therefore, considered to be anticipated by the teachings of Cassidy. The reduction of corrosion of the fermentor is inherent to the fermentation culture media disclosed by Cassidy since products produced in fermentation culture media are desired to be contamination-free. Rust produced in a fermentor containing a culture medium for producing a product would inherently be undesirable. Cassidy et al. teach low amounts or omit the presence of chloride, thus, the presence of low amounts of chloride salts, or lack thereof, is also inherent to the teachings of Cassidy et al. because its presence in too high a quantity would produce the undesirable result of corrosion.

However, in the alternative that there is some unidentified claimed characteristic for which would provide for some difference between what is claimed and what is taught by

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Cassidy, then the difference is considered to be so slight as to render the claims obvious over Cassidy. Clearly one of skill in the art at the time of applicants' invention would have been motivated to use Davis salts as the primary source of sodium ion in a fermentor. These salts are taught to be useful for culturing microorganisms in a fermentor. Thus, one of skill would have expected successful results using a non-chloride sodium salt to minimize chloride concentration. One of skill would have further recognized that chloride is a corrosive ion in fermentors and to limit its presence in a fermentor would have been an obvious desirable solution to reducing corrosion therein. Therefore, in the absence of convincing and persuasive evidence to the contrary the claims are rendered alternatively *prima facie* obvious over Cassidy.

Claims 51-52, 61-62, 66-67 and 72-74 are free of the prior art. However, these claims are objected to for being dependent upon rejected base claims and claims 63-65 are further objected to for being potential essential duplicates of claims 68-71 because if these claims are limited to claims 66-67 then they will be duplicates of claims 68-71. Thus, claims 63-67 should be canceled in favor of the allowable claimed subject matter.

Claims 68-71 are deemed allowable subject matter.

The rejected and objected claims fail to be patentably distinguishable over the state of the art discussed above and cited on the enclosed PTO-892 and/or PTO-1449. Therefore, these claims are properly rejected.

The remaining references listed on the enclosed PTO-892 and/or PTO-1449 are cited to further show the state of the art.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is (703) 308-4245. The examiner can normally be reached on Mondays to Fridays from 9:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn, can be reached on (703) 308-4743. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3592.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

  
Deborah K. Ware

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May 5, 2001

  
DAVID M. NAFF  
PRIMARY EXAMINER  
ART UNIT 1651